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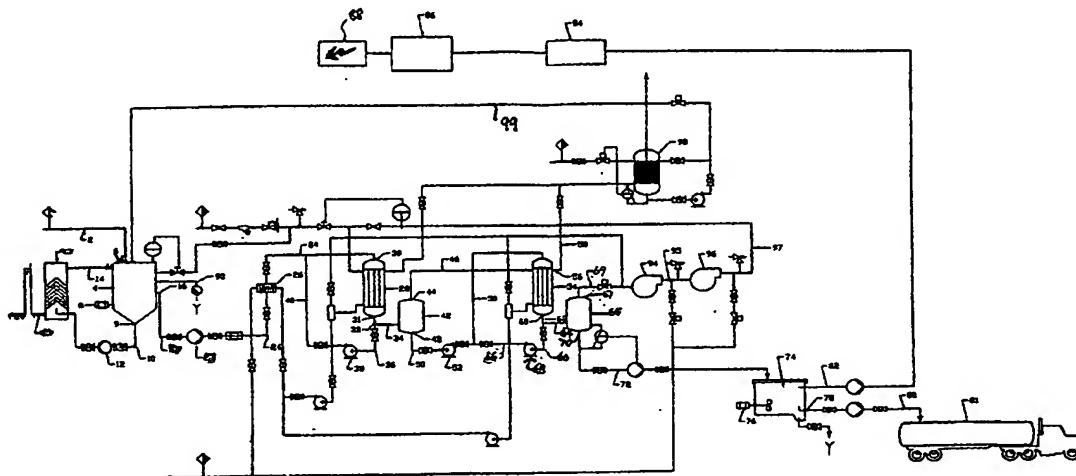
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(54) Title: REFINING PROCESS AND APPARATUS



(57) Abstract: An apparatus and method is provided for treating a waste material, particularly an aqueous waste material containing fats, oils and greases (FOG), involving the use of at least two stages in which, in the first stage, the aqueous waste material is subjected to a separation step in which water is removed to leave a partially refined stream containing the FOG followed by a second treatment stage, in which the partially refined FOG stream is further refined by removing more of the water so as to produce a FOG-containing stream that has a low water content which can be used as a fuel. In one embodiment, the refined FOG is used as a fuel for a combustion engine, typically a hydrogen assisted combustion engine for generating electricity. The energy generating plant can be combined with the waste treatment plant or the two can be separated from each other. One of the characteristics of this invention is that the water removed from the waste material can be recycled for use in the process, thereby providing energy saving as the introduction of fresh steam is not continuously required.

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